Fig. 1

Fig.2A ST
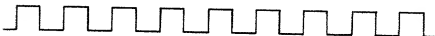
Fig.2B CK

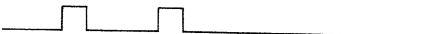Fig.2C CTL1
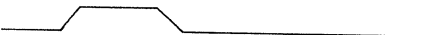
Fig.2D OUT1

Fig.2E CTL2

Fig.2F OUT2

Fig.2G CTL3
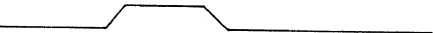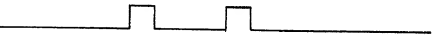
Fig.2H OUT3

Fig.2I CTL4

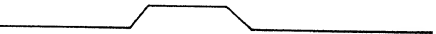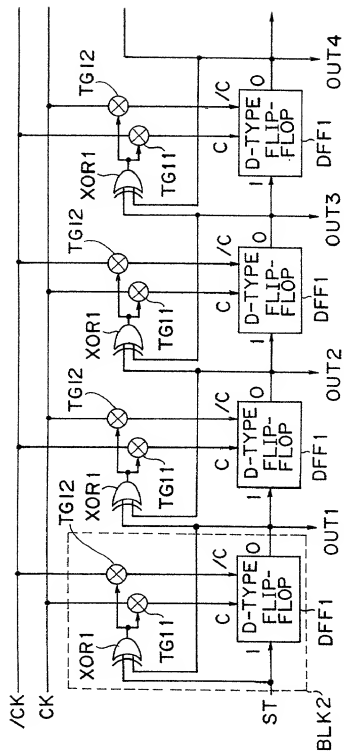Fig.2J OUT4

Fig.3

Fig.4
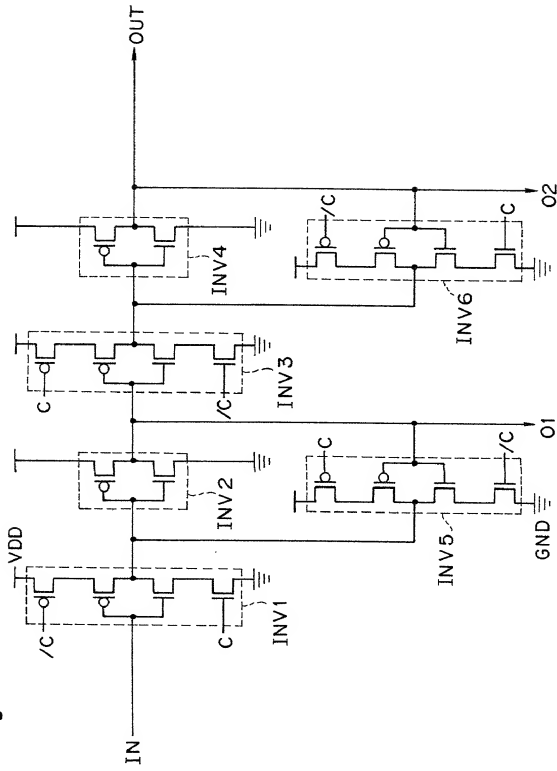
Fig.5A   ST
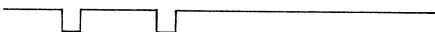
Fig.5B   CK

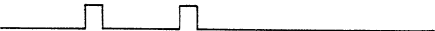Fig.5C   /CK

Fig.5D   XOR1

Fig.5E   C1

Fig.5F   /C1

Fig.5G   OUT1

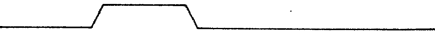Fig.5H   XOR2

Fig.5I   C2
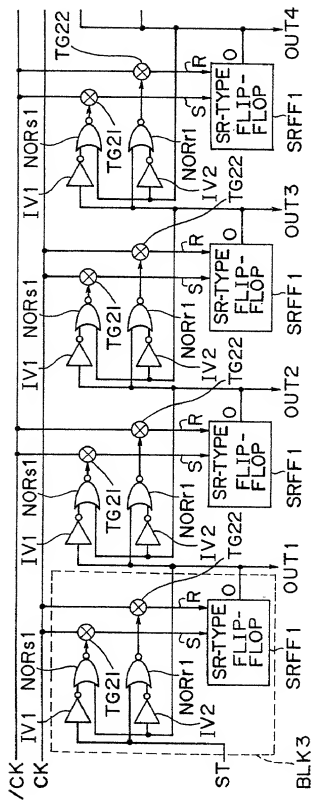
Fig.5J   /C2

Fig.5K   OUT2

Fig. 6

Fig. 7

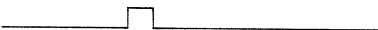Fig.8A ST

Fig.8B CK

Fig.8C /CK

Fig.8D NORs1

Fig.8E NORr1

Fig.8F S1

Fig.8G R1

Fig.8H OUT1

Fig.8I NORs2
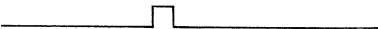
Fig.8J NORr2

Fig.8K S2

Fig.8L R2

Fig.8M OUT2

Fig. 9

Fig.10

Fig. 11
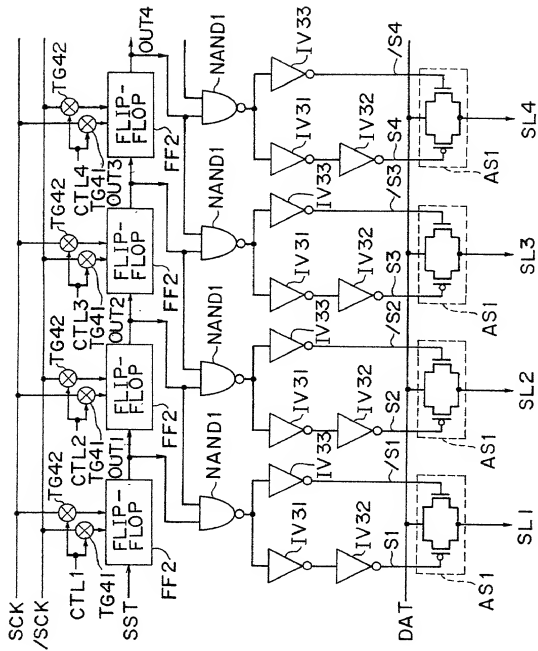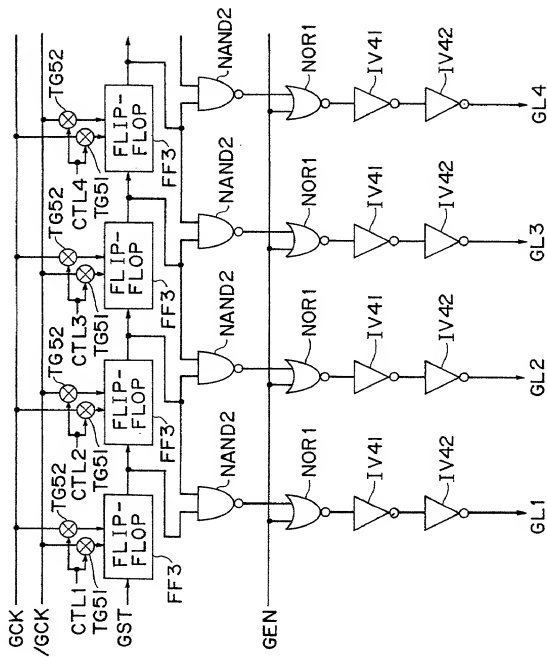
Fig. 12

Fig.13A SST

Fig.13B SCK

Fig.13C CTL1

Fig.13D OUT1

Fig.13E CTL2

Fig.13F OUT2

Fig.13G CTL3

Fig.13H OUT3

Fig.13I CTL4

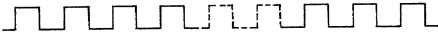Fig.13J OUT4
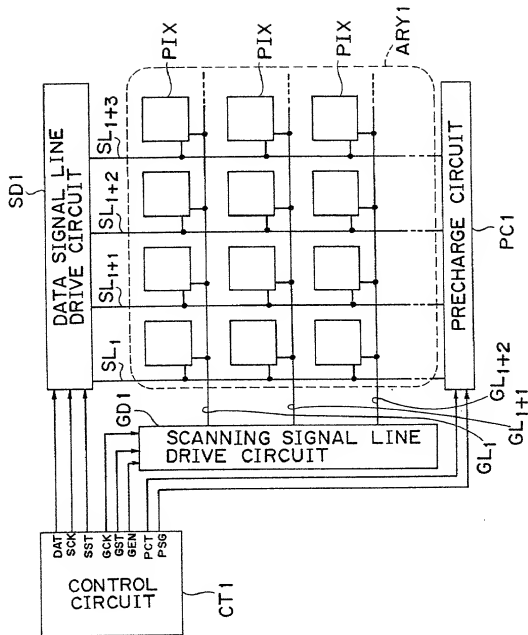
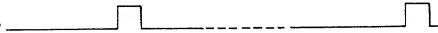Fig.14A SST

Fig.14B SCK

Fig.14C CTL1

Fig.14D OUT1

Fig.14E CTL2

Fig.14F OUT2
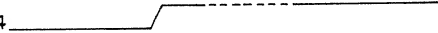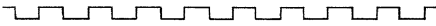
Fig.14G CTL3

Fig.14H OUT3

Fig.14I CTL4

Fig.14J OUT4

Fig. 15

Fig.16A ST

Fig.16B /CK

Fig.16C CTL1

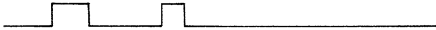*Fig.16D* OUT1
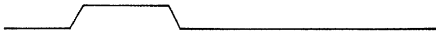
Fig.16E CTL2

Fig.16F OUT2

Fig.16G CTL3

Fig.16H OUT3

Fig.16I CTL4
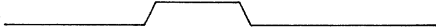
Fig.16J OUT4

Fig. 17
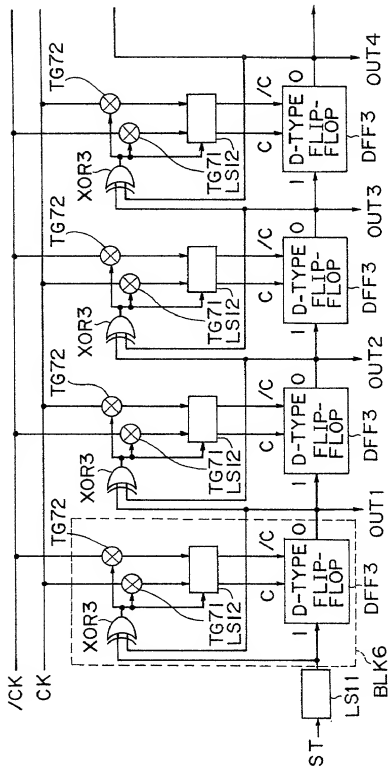
Fig.18A	ST	
Fig.18B	CK	
Fig.18C	/CK	
Fig.18D	XOR1	
Fig.18E	C1	
Fig.18F	/C1	
Fig.18G	OUT1	
Fig.18H	XOR2	
Fig.18I	C2	
Fig.18J	/C2	
Fig.18K	OUT2	
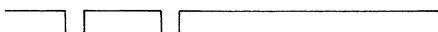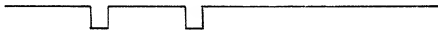
Fig. 19

Fig.20
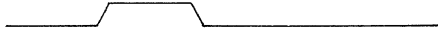
Fig. 21
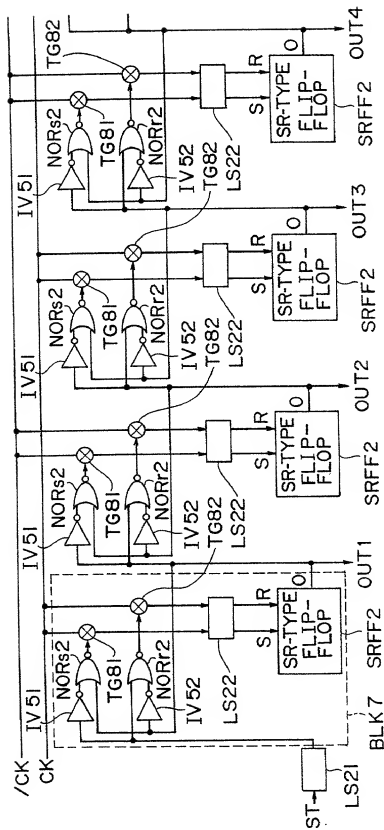
Fig. 22 A	ST	
Fig. 22 B	CK	
Fig. 22 C	/CK	
Fig. 22D	NORs1	
Fig. 22E	NORr1	
Fig. 22F	S1	
Fig. 22G	R1	
Fig. 22H	OUT1	
Fig. 22 I	NORs2	
Fig. 22 J	NORr2	
Fig. 22K	S2	
Fig. 22L	R2	
Fig. 22M	OUT2	
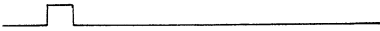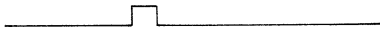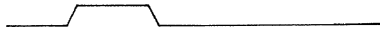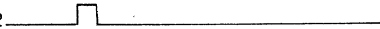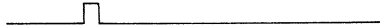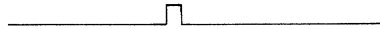
Fig.23

Fig.24

Fig. 25

Fig. 26

Fig. 27

Fig. 28
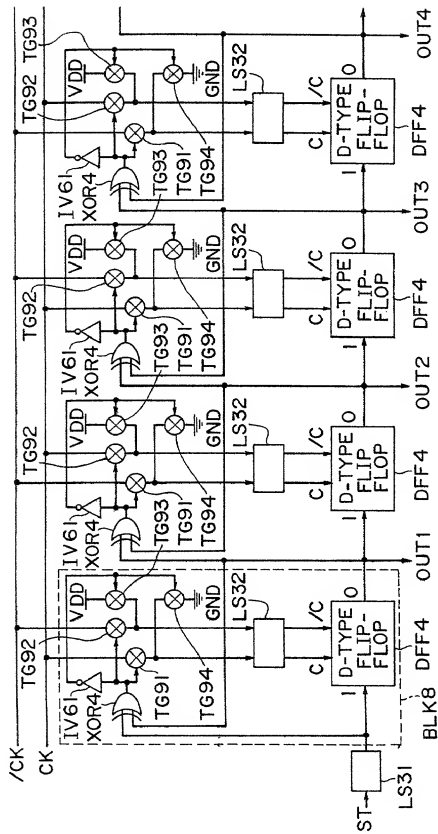
Fig.29A SST

Fig.29B SCK

Fig.29C CTL1

Fig.29D OUT1

Fig.29E CTL2

Fig.29F OUT2

Fig.29G CTL3

Fig.29H OUT3

Fig.29I CTL4

Fig.29J OUT4

Fig.30A SST

Fig.30B SCK

Fig.30C CTL1

Fig.30D OUT1

Fig.30E CTL2

Fig.30F OUT2

Fig.30G CTL3

Fig.30H OUT3

Fig.30I CTL4

Fig.30J OUT4

Fig. 31

TOKOEC 2519440

CONTROL CIRCUIT — CT2

DAT
SCK
SST
GCK
GST
GPS
PCT
PSG

SD2
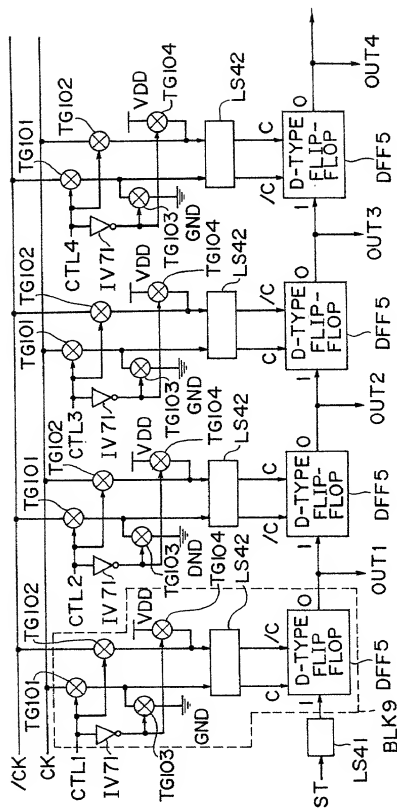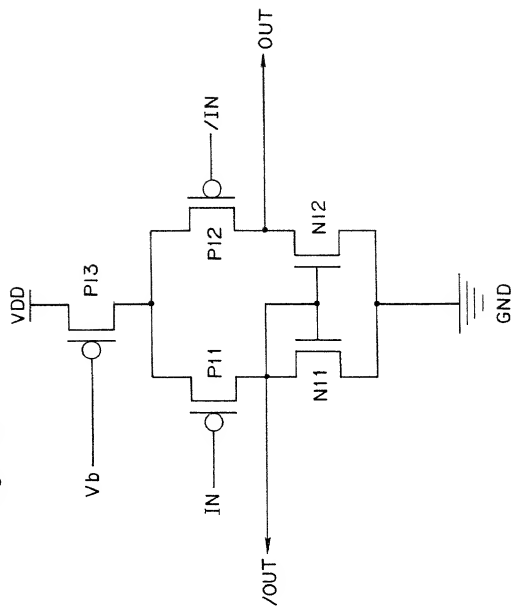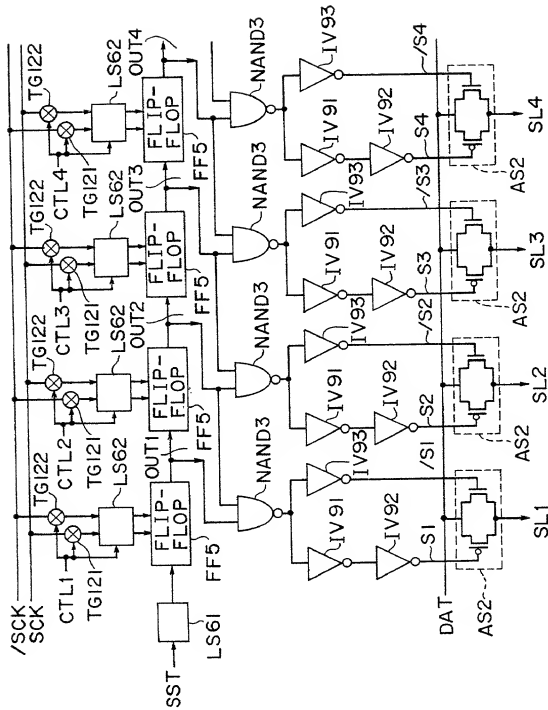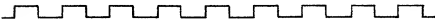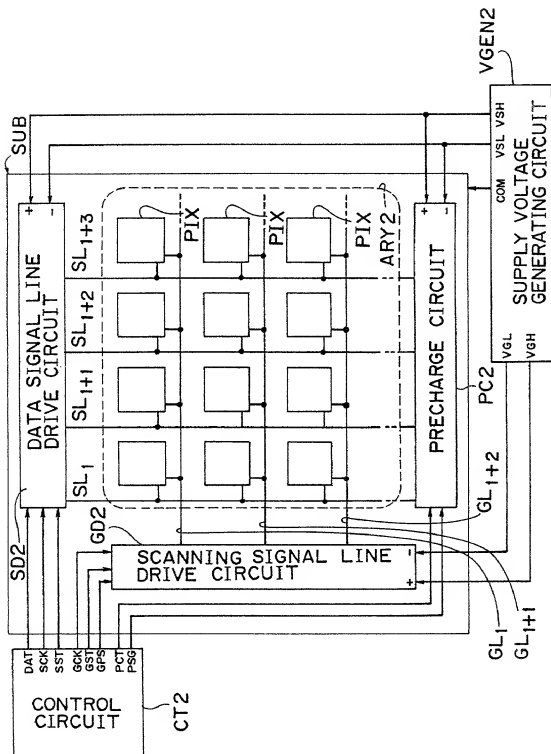
GD2

DATA SIGNAL LINE DRIVE CIRCUIT

+   −

SUB

SL$_l$ SL$_{l+1}$ SL$_{l+2}$ SL$_{l+3}$

PIX   PIX   PIX

ARY2

SCANNING SIGNAL LINE DRIVE CIRCUIT

GL$_{l+2}$

GL$_l$
GL$_{l+1}$

PRECHARGE CIRCUIT

+   −

PC2

VGL   VGH

COM   VSL VSH

SUPPLY VOLTAGE GENERATING CIRCUIT

VGEN2

Fig.32

Fig.33A

21

Fig.33B

22

Fig.33C

EXCIMER LASER

22a

Fig.33D

23

Fig.33E

23   24

Fig.33F

25

Fig.33G

P⁺ ION DOPING

23A   23B   26

Fig.33H

B⁺ ION DOPING
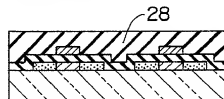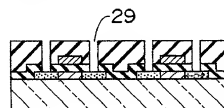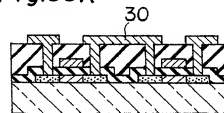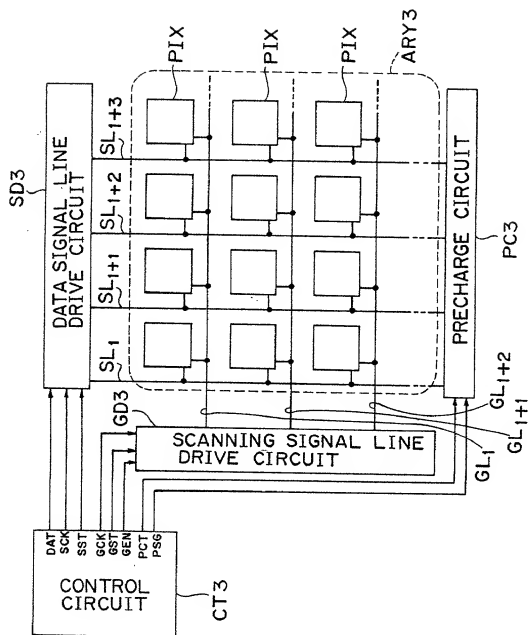
27

Fig.33I

28

Fig.33J

29

Fig.33K

30

Fig. 34 PRIOR ART

Fig. 35 PRIOR ART
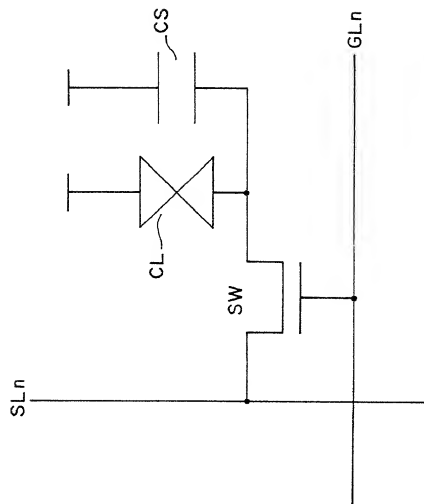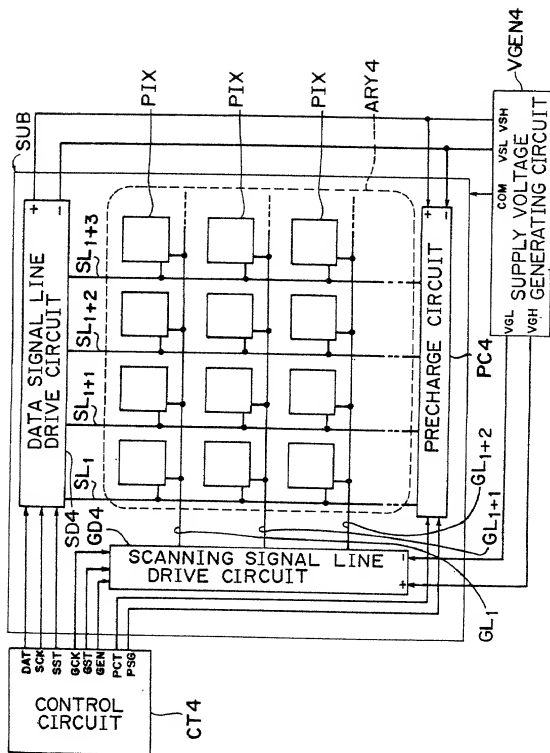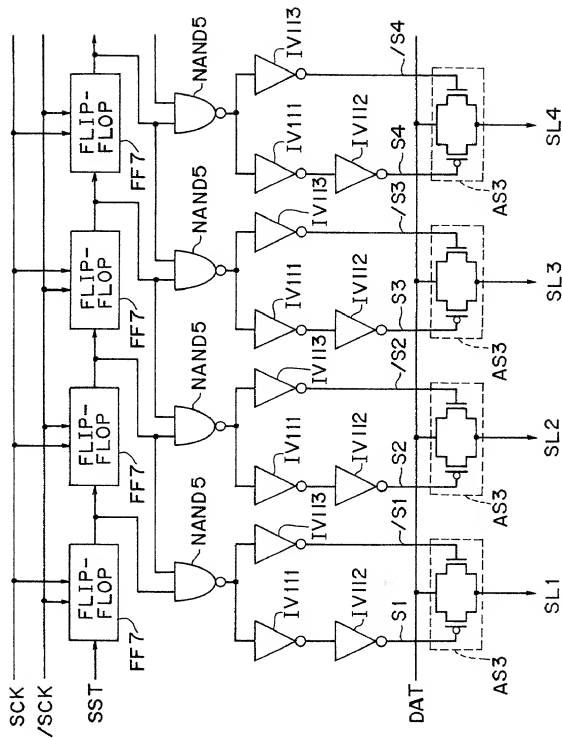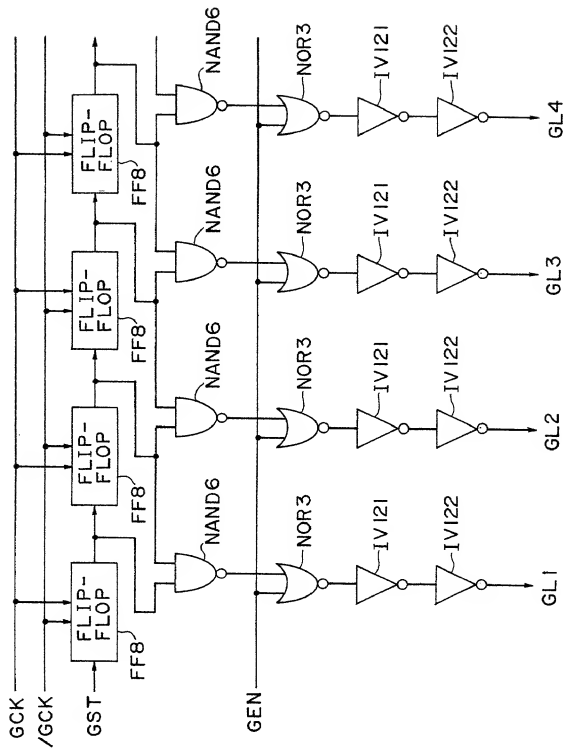
Fig.36 PRIOR ART

Fig.37 PRIOR ART

Fig.38 PRIOR ART

Fig.39 PRIOR ART

Fig.40A
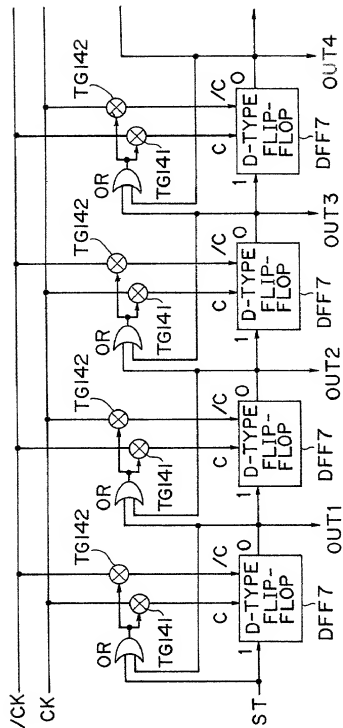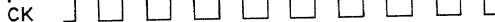PRIOR ART
ST

Fig.40B
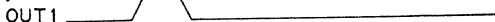PRIOR ART
CK

Fig.40C
PRIOR ART
CTL1

Fig.40D
PRIOR ART
OUT1

Fig.40E
PRIOR ART
CTL2

Fig.40F
PRIOR ART
OUT2
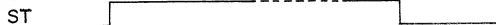
Fig.40G
PRIOR ART
CTL3

Fig.40H
PRIOR ART
OUT3

Fig.40I
PRIOR ART
CTL4

Fig.40J
PRIOR ART
OUT4

Fig.41A
PRIOR ART
 ST

Fig.41B
PRIOR ART
 CK

Fig.41C
PRIOR ART
 CTL1

Fig.41D
PRIOR ART
 OUT1

Fig.41E
PRIOR ART
 CTL2

Fig.41F
PRIOR ART
 OUT2

Fig.41G
PRIOR ART
 CTL3

Fig.41H
PRIOR ART
 OUT3

Fig.41I
PRIOR ART
 CTL4

Fig.41J
PRIOR ART
 OUT4